CTIA
Building The Wireless Future™
Cellular Telecommunications & Internet Association

January 24, 2003

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
12th Street Lobby, TW-A325
Washington, DC 20554

Re: ***Ex Parte* Presentation**
IB Docket No. 01-185; ET Docket No. 95-18; ET Docket No. 00-258

Dear Ms. Dortch:

On January 22, 2003, Nextel Communications, Inc. ("Nextel") filed an ex parte presentation with the Commission regarding the potential for interference between PCS and terrestrial services provided by MSS licensees, in the event that the Commission was to grant MSS licensees such authority. That material was also discussed generally in a meeting attended by CTIA and various representatives of the wireless industry on the same date. This letter responds to the Nextel Ex Parte Presentation.

Nextel's submission agrees with CTIA that interference from MSS mobile transmitters into PCS mobile receivers is possible. However, Nextel notes that several conditions would have to be present for such interference to occur, and believes that the probability of such occurrences is very low. Specifically, Nextel finds that interference would occur only when (1) both PCS and MSS/ATC mobiles are very close to each other, (2) both mobiles are making calls, (3) the desired signal for the PCS mobile is very weak, and (4) the MSS/ATC mobile is transmitting at its maximum power. (See Nextel's Ex Parte Presentation at page 5).

CTIA agrees in principle with Nextel's findings. Yes, both mobiles would have to be making calls for interference to occur, and as CTIA has noted many times previously, the interference is a result of the two mobiles operating in close physical proximity to one another. CTIA agrees with Nextel that the probability of this occurrence is low in more remote areas. However, as Nextel notes, the probability of this situation occurring in dense urban areas is much greater. In fact, CTIA believes that the probability is likely to be very high, as described here.

CTIA agrees with Nextel that the potential for interference exists where the desired signal for PCS mobiles is weak. However, we disagree with Nextel that the probability for PCS mobiles to receive weak signals is very low, even in urban areas. In urban areas, signals are often attenuated due to shadowing and attenuation by buildings, particularly when attempting to place calls from indoor environments. In rural areas, signals are often weak due to propagation loss over large distances encountered in typical rural cells.

CTIA agrees with Nextel that the potential for interference from MSS/ATC phones is not as great if those phones are transmitting at lower power levels. In our ex parte presentation of January 22nd, we noted the greater potential for harmful interference to occur if the emissions from MSS/ATC phones are not limited. If the MSS/ATC phones are operated up to the current FCC limit of –13 dBm, for example, the PCS phone would experience harmful interference at distances of 399 meters or more. Obviously the probability of PCS and MSS/ATC phones being operated at the same time within this distance is high, even outside dense urban areas.

Under the auspices of the American National Standards Institute ("ANSI"), the wireless industry has established technical standards to ensure that transmissions from its own PCS phones – which are separated by only 20 MHz from the PCS receive band – do not cause harmful interference. As noted in our meeting of January 22nd, the emissions limit for GSM phones is –61 dBm/MHz and the standard for CDMA phones is –81 dBm/MHz. These standards ensure that PCS phones can be operated within close proximity to one another without harmful interference. Importantly, Nextel noted in the meeting of January 22nd that its analysis assumed that the MSS/ATC phones would comply with the more rigorous industry specifications. Using these assumptions, it is understandable how Nextel would conclude that the probability of interference occurring is very low. CTIA would agree with Nextel that a more stringent out-of-band spurious limit would help address the problem, and reiterates its request for the Commission to establish an emissions limit for MSS/ATC operations that is more comparable to the industry standard.

Finally, CTIA disagrees with Nextel that harmful interference between PCS and MSS/ATC can be resolved through coordination among PCS and MSS licensees. Fundamentally, coordination between mobile stations cannot be achieved since the MSS system operator has no control or advance knowledge of the geographic locations of its mobile stations relative to PCS mobile stations, nor vice versa. Moreover, the problems associated with resolving interference in the marketplace are even more acute because MSS licensees would have no incentive to negotiate. PCS operators resolved the potential for interference between PCS mobiles by adhering to strict out-of-band emissions standards. The same sort of solution is needed to reduce the risk of harmful interference into PCS receivers from MSS/ATC mobile transmitters. That solution must include adherence to stricter out-of-band spurious emission standards plus adequate frequency separation to enable the more stringent spurious limits to be achievable in practice.

Pursuant to Section 1.1206(b)(2) of the Commission's rules, this letter is being filed electronically. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,

Diane Cornell

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cc: Bryan Tramont
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